COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Northern Virginia Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

TransMontaigne Product Services Inc.
3790 Pickett Road,
Fairfax, Virginia 22031
Permit No. NVRO-70306

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, *TransMontaigne Product Services Inc.*, has applied for a Title V Operating Permit for its Fairfax facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date:_____

Air Permit Manager:_____ Date:_____

Regional Permit Manager:_____ Date:_____

FACILITY INFORMATION

Permittee
TransMontaigne Product Services Inc
3790 Pickett Road
Fairfax, Virginia 20301

Facility
TransMontaigne Product Services Inc.
3790 Pickett Road
Fairfax, Virginia 20301

AIRS ID No. 51-059-0082

SOURCE DESCRIPTION

SIC Code: 5171

The facility is a petroleum liquids storage and distribution facility with a potential to operate 8760 hours per year. It is comprised of eight vertical fixed roof tanks equipped with internal floating roofs with mechanical seals which may storage either gasoline or distillate products, three vertical fixed roof tanks for storing distillates, additives, or water, five horizontal tanks for storing additives, low sulfur diesel fuel, or Jet A fuel. The facility has one loading rack that may load either gasoline or distillate. It is comprised of five lanes with twenty-three loading arms, and it is connected to a vapor*combustion* unit *(VCU)*, and properly equipped to dispense gasoline or other organic liquids with vapor pressures greater than 1.5 pounds per square inch (psi). All five lanes are equipped with bottom filling supply lines. The facility is a Title V major source of volatile organic compounds. The source is located in an ozone non-attainment area, and it is not a prevention of significant deterioration (PSD) source. The facility was previously permitted under a minor source permit to construct and operate two 80,000 barrel (internal) floating roof tanks. The permit was issued on September 5, 1974. These two tanks are subject to 40 CFR 60, Subpart K. All other facilities at this source are grandfathered. Prior appropriate notifications have been made to establish this facility as exempt from 40 CFR 63, Subpart R.

COMPLIANCE STATUS

The facility is inspected twice a year.

The source has been and continues to be in compliance with 9 VAC 5-40 Article 37 and 40 CFR 60, Subpart K.

SIGNIFICANT EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Emission Unit Description	Rated Capacity (gallons)	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled
LR-1	Truck Loading Rack	650 gallons/minute/arm (gpm/min/arm) (23 loading arms)	Vapor Control Unit (Refrigeration/ Condensing)	*Zink VCU*	VOC (all sources)
ST-101	Storage Tank	2,355,780 gal	Internal Floating Roof	-	
ST-102	Storage Tank	2,356,956 gal	Internal Floating Roof	-	
ST-104	Storage Tank	2,356,956 gal	Internal Floating Roof	-	
ST-105	Storage Tank	2,355,906 gal	Internal Floating Roof	-	
ST-109	Storage Tank	595,476 gal	Internal Floating Roof	-	
ST-110	Storage Tank	808,500 gal	Internal Floating Roof	-	
ST-111	Storage Tank	3,291,204 gal	Internal Floating Roof	-	
ST-112	Storage Tank	3,291,204 gal	Internal Floating Roof	-	

When gasoline storage tanks are used for storing distillates they are not subject to Rule 4-37. The inspections on the roof (cover) seals are not required during distillate storage. If a tank is out of gasoline service for more than one year, it must undergo inspection as in Condition III.B.2. before returning to gasoline service.

EMISSIONS INVENTORY

The primary emissions from this source are volatile organic compounds (VOCs). The potential emissions from all of the facility emission sources are 273.63 tons/year (tons/yr.). This total includes all Hazards Air Pollutants (HAPs). Potential emissions are listed as follows:

Loading Racks and Tank Cleaning	-	169.11 tons/yr.
Tanks, gasoline, distillate and additives	-	100.59 tons/yr.
Equipment fugitives and Parts Cleaning (Kerosene)	-	3.93 tons/yr.

Hazardous Air Pollutants – Tons/Yr. (Potential)							
Isooctane	Benzene	Ethylbenezene	Hexane	Toluene	Xylene (Mixed)	Methyl tertiary butyl ether (MTBE)	Total HAP
2.0150	2.2925	0.3342	4.0831	3.5298	1.4268	Trace	13.6815

This includes all sources, and it is based on a throughput of 730,000,000 gallons of gasoline.

Actual VOC emissions which include HAPs for previous years were as follows:

1996	-	67.23 tons/yr.
1997	-	31.51 tons/yr.
1998	-	34.18 tons/yr.

The marked change in emissions reduction from 1996 to 1997 occurred as a result of the vapor recovery unit (VRU) modification that added liquid nitrogen (LN_2) cooling. Copies of the 1997 and 1998 annual emissions inventories are attached.

EMISSION UNIT – TANKS

Emissions to the atmosphere from the fixed roof gasoline tanks shall be controlled by internal floating roofs (or covers) resting on the surface of the liquid contents and equipped with closure seals to close the space between the floating roof edge and the tank shell. Tanks storing volatile organic compounds (VOC) shall achieve a minimum of ninety percent (90%) reduction by weight in emissions. The storage of petroleum products with a true vapor pressure greater than or equal to 1.5 pounds per square inch absolute (psia) shall achieve this reduction by installing an internal floating roof equipped with closure seals.

All gasoline storage tanks located at this facility conform to the above requirements. These requirements are specified in 9 VAC 5-40-5230.A.1.a. and 9 VAC 5-40-5230.B.4. Thanks so equipped may store either gasoline or distillates. A gasoline storage tank that sometimes stores distillates is referred to as a “swing” tank. When storing distillate fuel, the rigorous requirements of gasoline storage would be minimized. For example, the requirement to minimize time the floating roof is standing on its legs would not be relevant to storage of distillate fuel. The annual and other inspections would, however, remain in force.

Fixed roof tanks storing petroleum liquids with a vapor pressure less than 1.5 psia under actual storage condition or, in the case of filling or processing, under actual filling conditions are exempt from Rule 4-37. (9 VAC 5-40-5200C)

EMISSION UNIT – LOADING RACK/*VCU*

A vapor combustion unit (VCU) shall control VOC emissions to the atmosphere from the loading rack. The loading configuration shall direct all vapors and air from the tanker truck to the *VCU*. A reduction of 90% of the VOCs emitted to the atmosphere is satisfied by the use of a *VCU* (9 VAC 5-40-5220.B.2). Maximum emissions to the atmosphere from the *VCU* shall be thirty-five milligrams (35mg) of total organic compounds per liter (mg/L) of gasoline loaded. The thirty-five (35) mg/L limit more than satisfies the ninety percent (90%) reductions and is a voluntary limits. *The unit shall be tested* in accordance with 9 VAC 5-40-5230.C.

The *VCU* is required to be stacked tested at least once per permit term, and the test must occur within eighteen (18) months of the permit issuance. The *VCU shall be* tested annually *to demonstrate an emission rate no greater than the 10mg/L in order to avoid installing a VOC CEMS*.

The loading rack dispensing valves and fittings are vapor and liquid tight. There shall be no leakage. During the loading and unloading of tanker trucks there shall be no VOC concentrations detected greater than 100 of the lower explosive limit (LEL), measured as propane, at two and one-half (2.5) centimeters around the perimeter of a potential leak source as detected by a combustible gas detector. The regulation for this is found at 9 VAC 5-40-5220.G.4.

The limit on annual throughput at the loading rack (LR-1) is *480,000,000* gallons of conventional gasoline (essentially with no methyl tertiary butyl ether (MTBE)) and *250,000,000* gallons of reformulated gasoline (RFG) that contains MTBE, calculated monthly as the sum of each 12-month period. A throughput limit total of 730,000,000 gallons was requested in a letter to EPA with a copy to the Virginia Air Pollution Control Director dated December 13, 1996. This letter also contained results of the emission screening equations where $E_t = 0.89$. The 0.89 figure was in error. The correct number was supposed to be $E_T - 0.4$. This value was based on the total throughput being conventional gasoline and it was a worst possible case. The new value for E_T is 0.45 based on a throughput of 730,000,000 gallons of gasoline (where *480,000,000* gallons of stored liquid would be conventional gasoline and *250,000,000* gallons would be RFG).

Loading rack LR-1 is equipped to dispense either gasoline or distillated.

The facility limits are specified as “loading rack limits” because there are condition that may arise in which fuel would be received from a pipeline into a tank and returned directly to the pipeline with negligible emissions from the loading/unloading operation.

EMISSION UNIT – COLD CLEANER

The Cold Cleaner in use at this facility is of the *Safety Kleen* type. These small units are considered to meet the State standard by their basic design. Only non-halogenated solvents of the citrus-based type are used at this facility for metal degressing. The unit is considered an insignificant emission unit because the total annual emissions are less than five (5) tons/yr., which is within the limitations of 9 VAC 5-80-720.B.2.

TANKER TRUCK CERTIFICATION

Rule 4-37 required that tanker trucks must present certification of vapor tightness before begin loaded, and be free of visible leaks. A record of this certification and an

identification number are kept at the terminal. The terminal owner or operator has the responsibility to refuse to fill an uncertified, nonvapor-tight, or leaking tanker. The refusal is in the interest of safety. A tanker truck operator may be various means supply incorrect documentation about the vapor-tightness of this truck. Obviously, any visibly leaking tank will not be filled. The terminal owner or operator cross-checks each tank identification number assigned (when vapor tightness testing is performed). The tanker truck may be filled under these circumstances. When an uncertified tanker truck is discovered (or a tank certification has expired), the terminal owner or operator notifies the tanker truck owner that the nonvapor-tight tanker truck will not be reloaded at the terminal until proper certification has been presented.

MONITORING

The monitoring and recordkeeping requirements in Conditions III.B, IV.B, V.B, AND VI.B of this permit meet Part 70 requirements. While the original intent of the Title V permitting process was to refrain from adding new requirements, periodic monitoring had not been addressed. Periodic monitoring as it appears in this permit is based on state parameters.

Monitoring of tanks is accomplished by inspection of the tanks for leaks, regular inspection of internal floating roofs, where applicable, by use of the current Tanks model, and recordkeeping of the tank contents, true vapor pressure at storage temperature, and throughputs. These requirements are covered in Conditions III.A-C., of the Title operating permit.

Loading racks are monitored monthly for vapor and liquid leaks, Condition IV.B.1 and 2.

The cold cleaner is monitored by monthly inspection for equipment condition and functionality. This periodic monitoring is based on guidance from EPA. (Condition V.B.1 of Title V permit)

Facility Wide monitoring, Condition VI.B, combines the monitoring listed above and includes a monthly inspection of each valve, pump, open-ended valve or line, pressure relief device, sampling connection system, flange or other connector in the gasoline liquid transfer system. The inspection method used for detection is 9 VAC 5-40-5220.G.a. A logbook is required to be kept for this inspection.

Opacity limits, while applicable to this facility, are not monitored because the facility does not emit measurable particulates. The facility is paved. Particulates are present only from mobile sources (truck exhausts) and minor dust from paved roadways.

RECORDKEEPING

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include the following:

a. A record of tanks internal floating roofs and seals.
b. A record of the throughput and type of petroleum liquid product stored in each tank. This includes the monthly storage temperature, and the true vapor pressure of each liquid stored.
c. A record of the applicability equation per 40 CFR 63.420(a)(1)
d. A record of all inspection for liquid or vapor leaks at the Loading Rack *VCU*.
e. A record of the throughputs of each loading rack, listing the quantity and type of each product.
f. A record of the tanker truck certifications and identification numbers.
g. A record of the temperature and the vacuum/pressure at the inlet of the *VCU*.
h. A record of the monthly leak-check-while-loading/unloading conducted on the fittings of the tanker trucks and loading racks.
i. A record of each stack test conducted on the *VCU*.
j. A log of the monthly inspections and servicing of the Cold Cleaner degreasing unit.
k. A record of malfunctions of equipment which would cause a violations of any part of this permit.
l. A record of inspections, maintenance schedules, and service records for all air pollution related equipment.
m. A record of the calculated fugitive emissions from the tank degassing, losses through pumps, flanges, etc., losses at the loading rack from tanker truck loadings.

These records shall be kept on site for the most recent five-year period.
(9 VAC 5-40-5220.C; 9 VAC 5-40-5310; 9 VAC 5-80-110.F; and 9 VAC 5-80-110.F.1)

TESTING

The permit requires testing. When testing in conducted in addition to the monitoring specified in this permit, the permittee shall use the test methods and procedures found at 40 CFR 60, Appendix A. in accordance with procedures approved by the DEQ. Deviations from the approved test methods shall have the approval of both the DEQ and EPA. These test methods are as follows:

a. Method 18 – Measurement of Gaseous organic Compound Emissions by Gas Chromatography.
b. Method 21 – Determination of Volatile Organic Compound Leaks.
c. Method 25 – Determination of Total Gaseous Non-methane Organic emissions as carbon.
d. Method 25A – Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer.
e. Method 27 – Determination of Vapor Tightness of Gasoline Delivery Tank Using pressure-vacuum test.

The basis for these requirements is found at 40 CFR 60, Appendix A and 9 VAC 5-20-121.A.2

Once each month during tanker truck loading or unloading operations, a leak check shall be made around the hose connections and hatch lids to determine that no leaks exist as stated in Condition IV.B.A of the Title V permit. The procedure is defined in 9 VAC 5-40-5220.G.4. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

REPORTING

Reporting requirements for gasoline storage tank initial filling or refilling after being emptied and degassed is required as stated in Condition III.D. Reporting is also required where repairs are required which cannot be made in a timely manner.

Reporting both to DEQ and EPA of all performance (stack) tests of the *VCU* along with semi-annual monitoring reports is required – Condition IV.C and X.C. Reporting is required under General Conditions for an annual certification, permit deviation, and for a failure or malfunction.

STREAMLINED REQUIREMENTS

The Rule 4-37 required an emission limit of any volatile organic compound of 0.67 pounds per 100 gallons of gasoline loaded from a loading rack (vapor control). Existing facilities are limited to eighty milligrams per liter (80 mg/L) of total organic compounds. This facility has accepted a limit of 35 mg/L of total organic compounds. This reduction is a streamline according to EPA White Paper 2.

Additional streamlining includes periodic monitoring requirements that were not a part of any existing permit.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

STATE ONLY APPLICABLE REQUIREMENTS

The requirements of this permit are predominantly state only, but they are federally enforceable. The regulation that was not specifically addressed, but is still a requirement is the regulation on Odorous Emissions 9 VAC 5-50-310.

FUTURE APPLICABLE REQUIREMENTS

Currently, there are no future applicable requirements for this facility.

INAPPLICABLE REQUIREMENTS

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit.

Citation	Title of Citation	Description of Applicability
9 VAC 5-40-3410 through 3550	Emission Standards for VOC Storage and Transfer Operations	Since the provisions under petroleum liquids storage or transfer apply, and support tanks are less than 40,000 gallons capacity Article 25 does not apply (9 VAC 5-40-3410.C)
40 CFR 60, Subparts Ka and Kb Gasoline Storage Tanks	NSPS for storage vessels for petroleum liquids/volatile organic liquids	All gasoline storage tanks with exception of two* were constructed prior to June 11, 1973
40 CFR 63, Subpart R	National Emission Standard for Gasoline Distribution – Stage 1	Emissions are below 10 TPY for a single HAP and below 25 TPY for a combination of all HAP
40 CFR 68	Accidental Release Prevention Requirements: Section 112(r)	Petroleum Liquids (gasoline, diesel fuel, jet fuel, etc.) Are not subject to this rule

*These two tanks, ST-111 and ST-112 were constructed in 1975. 40 CFR 60, Subpart K is applicable.

Nothing in this permit shall alter the provisions of § 303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violations of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (I) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to § 10.1-1314 of § 10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to § 10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Recordkeeping and reporting shall be required for these emission units in accordance with 9 VAC 5-80-110 only insofar as emission inventory and fees apply. The following emission units at the facility are identified in the

application as insignificant emission units under 9 VAC 5-80-720.B and C:

Emission Unit No.	Emission Unit Description	Citation	Pollutant Emitted	Actual / Potential Contents	Rated Capacity (5-80-720 C) (Gallons)
	Island for fueling diesel trucks	9 VAC 5-40-5200 C	VOC	#2 Oil	-
ST-103	Vertical fixed roof	9 VAC 5-40-5200 C	VOC	#2 Oil / Kerosene	3,405,528
ST-106	Vertical fixed roof	9 VAC 5-40-5200 C	VOC	#2 Oil / Kerosene	211,470
ST-107	Vertical fixed roof	9 VAC 5-40-5200 C	VOC	Waste / kerosene	16,338
ST-108	Horizontal fixed roof	9 VAC 5-40-5200 C	VOC	Additive / kerosene	4,000
ST-113	Horizontal fixed roof	9 VAC 5-40-5200 C	VOC	Additive / gas additive	10,000
ST-114	Horizontal fixed roof	9 VAC 5-40-5200 C	VOC	Water / Jet A	1,000
ST-115	Horizontal fixed roof	9 VAC 5-40-5200 C	VOC	Additive / additive gas	4,000
ST-116	Horizontal fixed roof	9 VAC 5-40-5200 C	VOC	LS Diesel / Gas Additive	4,000

CONFIDENTIAL INFORMATION

Information supplied by the permittee does not require a declaration of confidentiality.

PUBLIC PARTICIPATION

The proposed permit was placed on public notice in the Washington Times on March 31, 2000.